

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket: SAKAI=17

In re Application of:

SAKAI et al.

Appln. No.: 10/518,057

Filed: December 16, 2004

For: ENZYME FOR DECOMPOSTION
SULFATED FUCAN DERIVED...

Atty. Docket: SAKAI=17

Conf. No.: 5726

Art Unit:

Washington, D.C.

October 27, 2005

INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner for Patents U.S. Patent and Trademark Office Randolph Building, Mail Stop Amendments 401 Dulany Street Alexandria, VA 22314

Sir:

This Information Disclosure Statement is submitted in accordance with 37 CFR §§1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

- [X] 1. This IDS should be considered, in accordance with 37 CFR §1.97, as it is filed before the mailing date of a first office action on the merits or before the mailing of a first Office action after the filing of a Request for Continued Examination under 37 CFR §1.114.
 - [X] 2. In accordance with 37 CFR §1.98, this IDS includes a list (e.g., form BN/SB/08A/B) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. Other than U.S. patent(s) and/or

17

published U.S. application(s), which 37 CFR §1.98(a)(2)(ii) does not require to be filed unless specifically required by the Office, a copy of each document listed is attached.

- [X] 3. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).
- [X] 4. Other information being provided for the examiner's consideration follows:

Attached is a copy of the Supplementary Partial European Search Report.

5. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in 37 CFR §1.56(b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

BROWDY AND NEIMARK Attorneys for Applicant(s)

By:

Allen C. Yun

Registration No. 37,971

ACY:pp

624 Ninth Street, N.W., Suite 300

Washington, D.C. 20001-5303

Telephone: (202)628-5197 Facsimile: (202)737-3528

G:\BN\A\Aoyb\Sakai17\pto\ids.feeOCT2005.doc

Complete if Known

10/518,057

December 16, 2004

Takeshi SAKAI et al.



Substitute for form 1449A/PTO

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

		Group Art Unit	
(use as many sheets as necessary)		Examiner Name	
1	of 2	Attorney Docket Number	SAKAI17

U.S. PATENT DOCUMENTS					
Fuerrises	Cite	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant
Examiner Initials*	No.1	Number-Kind Code ^{2 (if known)}	MINI-DD-1111	Applicant of Cited Document	Figures Appear
	AO	US-2001/0046696 A1		SAKAI et al.	
		US-			
		us-			
•		US-			
		US-			

Application Number

First Named Inventor

Filing Date

	FOREIGN PATENT DOCUMENTS					
		Foreign Patent Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines,	
Examiner Initials*		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶
	·					
	ļ					

Examiner	l Da	ate	
Signature	0	onsidered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¹For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449A/PTO

Sheet | 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 2

Complete if Known		
Application Number 10/518,057		
Filing Date	December 16, 2004	
First Named Inventor	Takeshi SAKAI et al.	
Group Art Unit		
Examiner Name		
Attorney Docket Number	SAKAI17	

	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Cite Initials* No.1		Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			
	AP	BERTEAU et al., Characterization of a new α -L fucosidase isolated from the marine moolusk <i>Pecten maximus</i> that catalyzes the hydrolysis of α -L-fucose from algal fucoidan (<i>Ascophyllum nodosum</i>), <i>Glycobiology</i> , 12(4)273-282 (2002)			
	AQ	TANAKA et al., Hydrolysis of fucoidan by abalone liver <i>a</i> -L-fucosidase, <i>FEBS Letters</i> , 9(1):45-48 (1970)			
	AR	DANIEL et al., Degradation of algal (Ascophyllum nodosum) fucoidan by an enzymatic activity contained in digestive glands of the marine molluse Pecten maximus, Carbohydrate Research, 322:291-297 (1999)			
	AS	VIEIRA et al., Structure of a fucose-branched chondroitin sulfate from sea cucumber, <i>The Journal of Biological Chemistry</i> , 266(21)13530-13536 (1991)			
	AT	VIEIRA et al., Occurrence of a unique fucose-branched chondroitin sulfate in the body wall of a sea cucumber, <i>The Journal of Biological Chemistry</i> , 263(34)18176-18183 (1988)			
	AU	RIBCIRO et al., A sulfated α-L-fucan from sea cucumber, Carbohydrate Research, 255:225-240 (1994)			
	AV	MOURÃO et al., Highly acidic glycans from sea cucumbers, <i>Eur. J. Biochem</i> , 166:639-645 (1987)			
	AW	BERTEAU et al., Sulfated fucans, fresh perspectives: structures, functions, and biological properties of sulfated fucans and an overview of enzymes active toward this class of polysaccharide, <i>Glycobiology</i> , 13(6)29R-40R (2003)			
	AX	MOURÃO et al., Searching for alternative to heparin sulfacted fucans from marine invertebrates, <i>TCM</i> , 9(8)225-232 (1999)			
	-				

Examiner	Date	
Signature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.